



Enterprise Application Integration (EAI) COD Design Alternatives Bad Data from Schools LOEs

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accenture



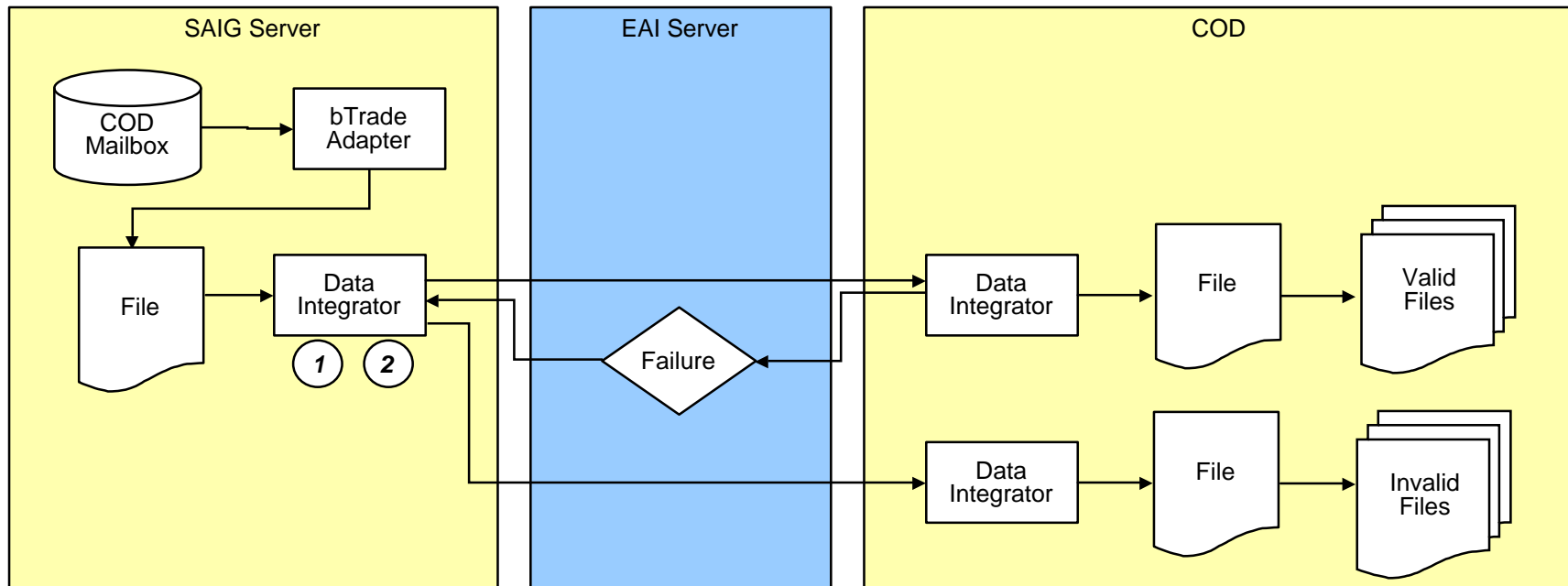
Business Context

Schools do not always provide correctly formatted data files as input to COD. Sometimes the files are sent with record lengths that exceed the specification.

- Currently, when a school sends a file with an invalid record length, the transfer of the file to TSYS fails, which generates a page to the EAI team.
- When the EAI team investigates the failure, and determines that it is due to an invalid record length, the file is e-mailed to customer service for resolution. This is a manual process
- Objective is to get all of the data files to TSYS, and segregate the files that have invalid record lengths.
- Highest number of such incidents to-date has been approximately 30 in a single day. Most recent experience is 2 or 3 per day.



School Input Processing - Option A



- bTrade adapter extracts file from mailbox
- DI compresses and sends the file.
- On Failure, SAIG will re-send the file after being prompted by EAI.

- EAI Server captures logging information on DI transfers
- On Failure EAI will re-request the file from SAIG.

- COD receives valid files as it does today (Valid File).
- On failure, COD rejects the file as it does today.
- On resend, COD will receive files at the adjustable record length (Invalid File) dataset.

Option A Summary

Pros:

- Minimal additional COD (TSYS) development.
- No increase in storage and operational costs.

Cons:

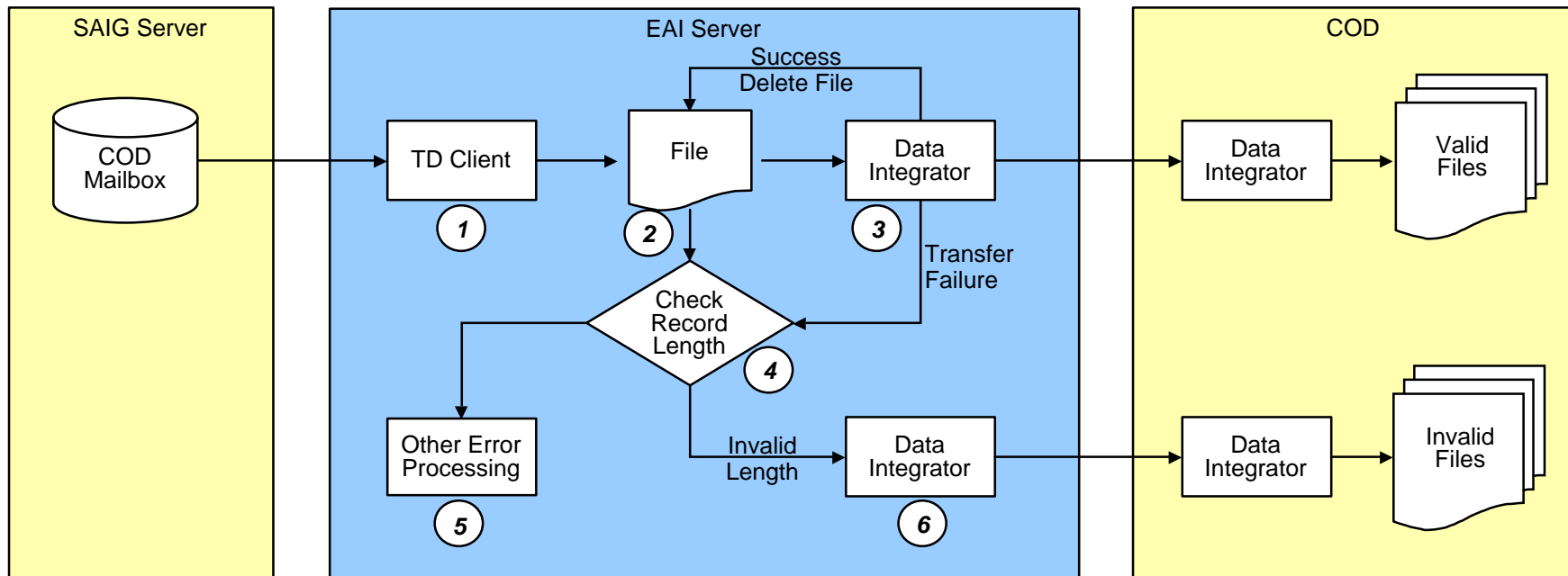
- Technical Architecture design inconsistent with the FSA EAI Architectural approach.
- Increased load on EAI Bus, SAIG, and VDC Network.
- EAI will not have insight to transfer failure reason.
- Customer Service will need to be trained for file diagnosis tasks currently performed by EAI.
- Addition of potential failure points.

LOE:

- 188 hours



School Input Processing - Option B



- Transfer mechanism converted to use TDClient to move data to EAI Server

- DI Transfers file to COD
- If transfer successful, file is deleted
- If transfer not successful, file is checked for valid record length
- If invalid record length, file is transferred to designated area at COD

- File is deleted when successfully transferred
- Other Error Processing could automatically retransmit other failed transfers, such as GDG failures
- EAI Server captures logging information on DI transfers

- COD handles invalid record length files with Customer Service and Schools

Option B Summary

Pros:

- EAI will provide specific record level detail for file transfer failure.
- No additional load on SAIG.
- Minimal additional COD (TSYS) development.

Cons:

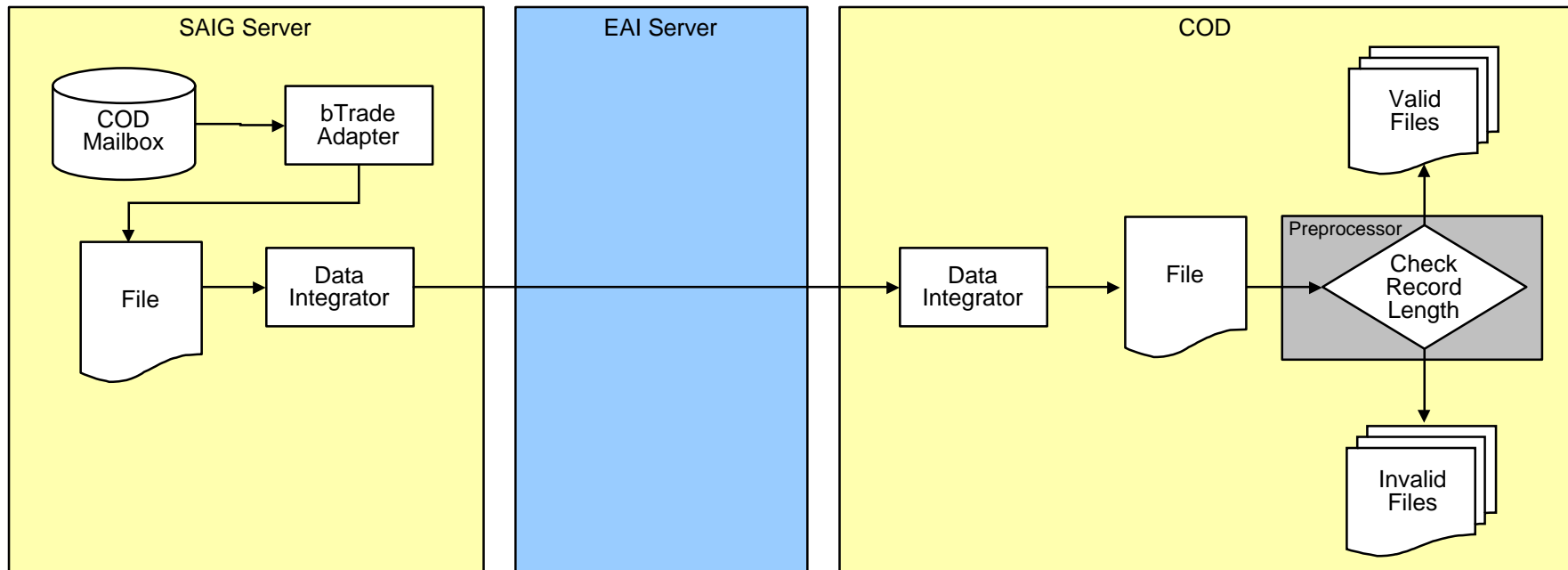
- Technical Architecture design inconsistent with the FSA EAI Architectural approach.
- Application logic now stored on EAI Bus.
- Increased costs for extra storage capacity needed on EAI Bus.
- Increased EAI Operations costs for COD.
- Addition of potential failure points.

LOE:

- 649 hours



School Input Processing - Option C



- bTrade adapter extracts file from mailbox
- DI compresses and sends the file
- This is the current configuration

- EAI Server captures logging information on DI transfers

- COD receives all files in an area that can accept various record lengths
- COD executes a record length check on each file and places it in the appropriate location



Option C Summary

Pros:

- Technical Architecture design consistent with FSA EAI Architecture approach.
- EAI will not need insight to transfer failure.
- No additional load on SAIG.
- No application logic stored on EAI Bus.
- No increased storage capacity needed on EAI Bus.

Cons:

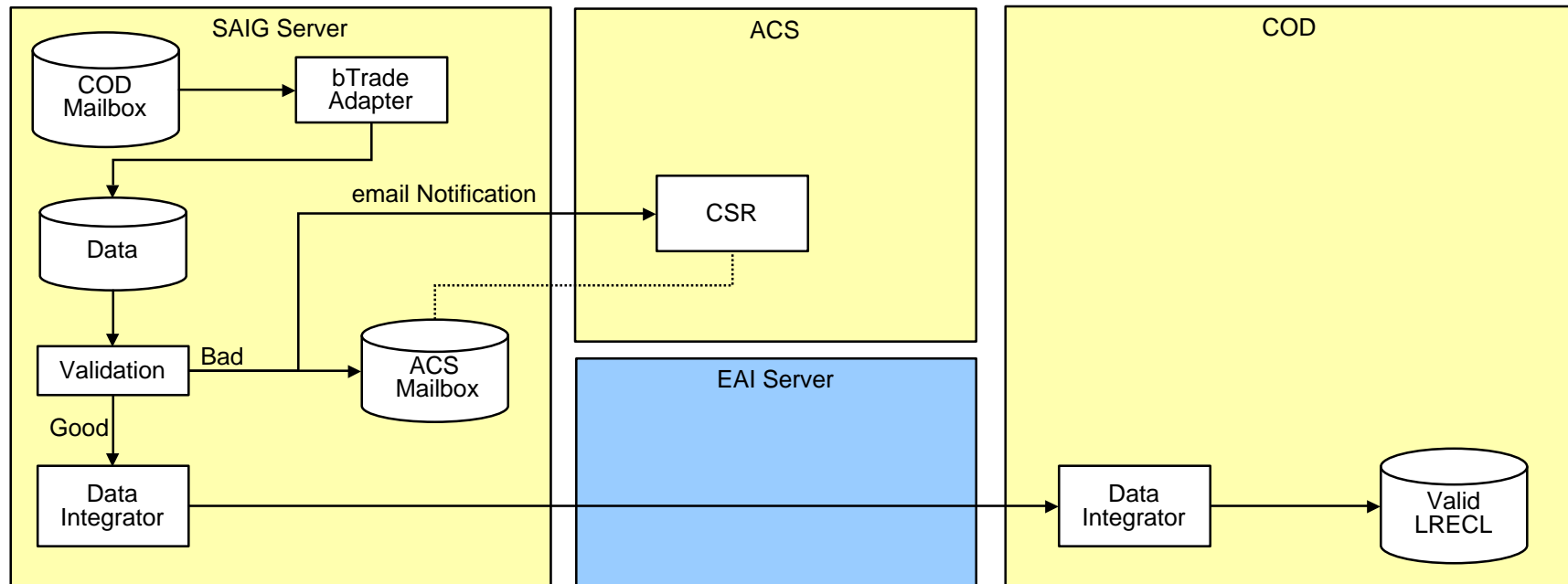
- Additional COD (TSYS) development required.

LOE:

- TBD from COD (TSYS)



School Input Processing - Option A1



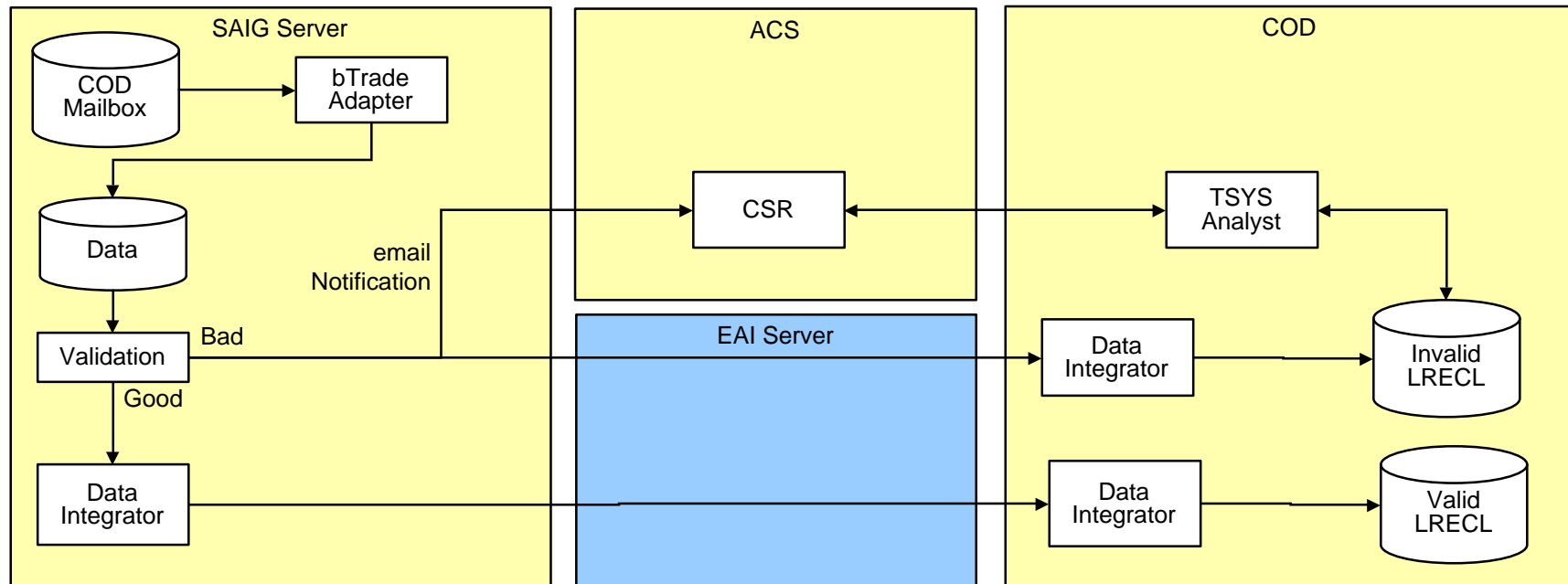
- bTrade adapter extracts file from mailbox
- Validation routine on SAIG inspects the file.
- If valid, DI compresses and sends the file.
- If invalid, an e-mail with the batch ID and error details will be sent to ACS. The invalid file itself will be placed in an SAIG mailbox for ACS to retrieve if necessary

- EAI Server captures logging information on DI transfers

- COD receives valid files as it does today.
- On failure, COD rejects the file as it does today.
- On failures at the valid dataset, COD will receive files at a adjustable record length dataset.



School Input Processing - Option A2



- bTrade adapter extracts file from mailbox
- Validation routine on SAIG inspects the file.
- If valid, DI compresses and sends the file.
- If invalid, an e-mail with the batch ID and error details will be sent to ACS. The invalid file itself will be sent to a special destination at TSYS.

- EAI Server captures logging information on DI transfers

- COD receives valid files as it does today.
- On failure, COD rejects the file as it does today.
- On failures at the valid dataset, COD will receive files at a adjustable record length dataset.